

interested they are given topics and the children write essays, and some are very much better than that which the Boston boy wrote. This is something an association of nurses could do. The expense of printing these cards is small and each child can take one home which can be hung up the same as a wall calendar.

## POST-OPERATIVE CARE WITHOUT DRUGS

By CHARLOTTE E. DANCY  
Battle Creek Sanitarium

It is my wish this morning to direct your attention to some physiologic methods of caring for patients who have to undergo surgical operations. By physiologic methods I mean those which aim to obey and fulfil the natural laws of the body as we know them, which aim to bring about natural conditions under unnatural circumstances. To do this I shall have to refer to what is done at the Battle Creek Sanitarium, an institution whose object in existence is that it may bring under one roof all the physiologic methods culled from various parts of the world, and may educate the people in these methods, and at the same time may discountenance anything, whether in habit of life, dress, food, medicine, or treatment of disease, which it thinks unphysiologic. I will say that drugs are not discountenanced when scientific investigation shows them to be the best things to use under existing circumstances. For instance, quinine is given in malaria, the serum for diphtheria, etc.

To wisely care for an operative case, one tries to bring about healthful conditions, but what is health? We have come to consider that a good definition of health is, pure blood freely circulating in all parts of the body. Realizing the vast power of the blood as the body's natural defender against invasion and restorer after injury, when one deliberately plans to cut the body, to perhaps remove some part of it, to chance an infection, and to lower the vital resistance by anæsthesia, it is reasonable to turn one's attention to the condition and circulation of the patient's blood before, during, and after an operation.

The subject for an operation is not likely to have either a high opsonic index or a perfect circulation of the blood in every organ of the body. What can be done to raise the opsonic index and to bring about a free circulation of pure blood? When Dr. Wright first made known his discovery of the opsonins, tests were made of the various drugs in common use to decide their effect upon the fighting power of the blood. Only one drug, and that protonuclein, increased the opsonins. The attention was then turned to the bath, and it was found that by reaction to a cold bath, the patient's fighting power was increased, also that alternate hot and cold applications raised the opsonic

index. As to the circulation, it is well known that applications of cloths wrung from water at a temperature above 98° stimulate the vasa dilators of the skin and reflexly those of the deep-seated organs. Applications at a temperature below 92° stimulate the vasoconstrictors of the skin and reflexly those of the deep-lying organs. Applications of water between 92° and 98° are neutral in their effect and so the nervous organism of the patient may be rested.

Having given our patients the usual preparation for anæsthesia, we begin on the anæsthetic table to control the heart's action and to establish and keep a free circulation of blood through the lungs. This we do by putting a compress of several thicknesses of gauze wrung dry from ice water on the front chest, and covering it with two thicknesses of flannel. Renew every five to fifteen minutes, giving a short friction with the hand between applications. Continue this throughout the operation. After operation, while still partly under anæsthesia, we give a lavage to empty the stomach of mucus, bile, the fumes of ether, etc. This we find lessens nausea and vomiting to a remarkable degree. After being bandaged, the patient is taken at once to a bed prepared with a hot hip and leg pack; a saline enema, one pint, at 110° is given. Then the pack is drawn over the patient. This keeps the patient warm and also keeps the blood in the extremities, preventing congestion in the liver, or at the seat of operation, and lessening pain. At the same time a short, very hot compress or fomentation is applied to the front chest for one minute, to dilate the skin blood-vessels and draw the blood to the surface. This is followed by a short, vigorous, cold friction to the chest and arms. The cold contracts the skin vessels and reflexes the deeper vessels, the friction assists the body to react to the cold, and reaction to cold is at all times tonic, increasing the leucocytes and raising the opsonic index. A wet cold compress is now applied to both front and back chest, and snugly covered with two thicknesses of heavy flannel. The cold friction is given to the arms, which are then covered by sleeves pinned to the flannel chest pack. This procedure takes a shorter time to do than to tell about it. During this time the hip and legs have been kept in the warm pack. Now uncover, and apply the tonic cold friction to each leg, drying, and wrapping either in a wet gauze compress or a dry muslin compress, covered by two thicknesses of flannel. If put on dry, these are for warmth; if wet, they keep a constant interchange of blood going on in the area which they cover. All these measures have been establishing a free circulation of blood, preventing congestion, lessening pain, and building up the fighting power of the blood.

But in spite of all this, there will be pain, and some treatment to the wound itself becomes necessary. Heat being the most soothing treatment, or an alternation of heat and cold, a very good way to apply it is by means of the luminous rays of the sun, directed to the parts over the dressings. The rays penetrate through the dressing to the wound and into the deeper tissues, relieving pain, preventing adhesions, and other sequelæ of the knife. The heat may be alternated with cold by laying a piece of mackintosh or oiled silk over the dressings and placing two or three light weight ice bags over this for about the same length of time, or two-thirds the length of time, that the heat was applied. In perineal wounds the light may be used or else an application of sterile gauze wrung from hot boracic acid solution placed directly over the stitches and covered with three applications of the flannel fomentation. For backache and other pains, following the strained position, etc., the fomentation or the radiant heat is invaluable. As a tonic the ice bag is the chief thing in use.

The treatments outlined are all repeated every three hours the first day, and during the night if the patient is awake. Three times a day, the second day and night, and the morning of the third day. After this they are replaced by some simpler form of treatment and a daily increasing massage when there is no fever.

A word ought to be said here about the values of fresh air, sunlight, water drinking, and diet as physiologic measures. But I shall only say that we use no flesh food, no alcohol, no tea, no coffee, and that the low standard of proteid is followed and all dietetic offers possible are made to build up healthy blood. My observations have been that by these natural methods of treatment patients are made more comfortable during illness and the system is left in a more tonic condition than after treatment by drugs. Also the painful sequelæ of operations are lessened, such as adhesions, phlebitis, neuritis, partial paralysis, etc.

MRS. IDA M. TICE.—I am still a member of the old school. The post-operative care of surgical cases is most important. On the immediate and final outcome I do feel the speaker has taken a stand remote from the literature. Physicians have determined that in normal metabolism a normal amount of food is required. That does not mean that such a diet is to be excluded. A deficient diet was never known to improve the character of the blood, much less the circulation. Both massage and the ice pack undoubtedly have an influence upon the heart, but it will be a long time before they will replace the use of the good old cardiac stimulants. I cannot quite imagine a patient with cardiac failure and a surgeon combating the condition vigorously with an ice pack. I rather think he would give a patient suffering with pain after a laparotomy a single hypodermic of morphia rather than cold and hot treatment. I would

like to ask the speaker just how cases of shock come off from the operating table.

MISS DANCY.—We do not have them; we prevent them. Prevention is the better part of cure. We are taught what to do in case one should occur. We apply a compress and then a bandage is put over that and drawn tight. At the same time a hot pack is given to the hips and legs and an ice pack is put over the heart. We do not get cases of shock, we prevent them.

MISS COURRIER.—Although I have been trained to be an exponent of the old school, I have seen an almost expiring patient respond as quickly to the application of a hot towel as he would to a hypodermic of ether. I should have said the hot towel was applied over the heart.

MISS ANNA C. JAMME.—At the Mayo brothers' hospital they rarely give a heart stimulant, they depend entirely on the saline after operation. We rarely have shock, and I do not believe the Doctors Mayo ever give a hypodermic, they depend entirely on the saline solution for a heart stimulant.

MRS. ROBB.—That form of treatment is not confined to the Doctors Mayo; it is general.

MISS DANCY.—When I was with Dr. Murphy we used the hot saline by the drop method and found it very beneficial.

## THE LIMITATIONS OF THE NURSING PROFESSION

BY EDITH BALDWIN LOCKWOOD

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IN considering the limitations of the nursing profession, we may in a general way classify them as those necessary to the profession's development and those restrictive to its development, or, to classify differently, we have: the limitation of origin, the limitation of purpose; the limitation of our system of education; and the limitation of our field of endeavor. These are to some extent correlated and interdependent and do not separate exactly according to the terms of the first classification.

The origin of the profession and the purpose of the origin impose distinctly different obligations. The origin was most humble, the purpose most noble. The origin was in the change from the crude, grossly neglectful attendance on sickness,—attendance that was considered the most menial and degraded form of personal service,—to attendance having humane handling and simple cleanliness as its object. The purpose actuating those who instituted this change was no more, no less, than the purpose of the profession to-day. If, in the strength of that purpose, it has grown in a scant half century from its origin in humble degraded service to the accepted rank of a profession, we must accept without challenge the scope of that purpose as imposing no limitations we may not well accept to-day.